of changing interest-rate and exchange-rate relationships. Here one possibility would be to cover any deficiency which could not be met out of previously accumulated interest earnings by using some of the dollars in the Account (which transfers this problem to that discussed under (ii) below, as would also be the case if interest were to be credited in the form of additional SDR claims). Another possibility would be for the United States to agree to make a non-interest bearing loan to the Account in any year in which there was such a deficiency, with any surplus being invested in a non-interest bearing deposit in the United States. Yet another possibility, discussed further below, is to use some of the Fund's gold stock to back the Account.

(ii) **Liquidation provisions:**
We do not envisage liquidation of the Account; but some arrangements are necessary if only because the Articles of Agreement of the Fund provide for the liquidation of the SDR Department and indeed of the Fund itself. In this regard one possibility would be a simple risk-sharing arrangement. In the event that the dollar holdings of the Account were insufficient to redeem the dollar value of the SDR claims of participants, half of the additional dollars required might be supplied by the United States, and the other half by participants in proportion to their original participation; an inverse arrangement would be made in the event of a surplus. An alternative that has been proposed is that the Fund might make an allocation of SDRs proper, which would be turned into the Account.

One proposed solution to both aspects of the problem discussed above would be for some of the Fund's gold holdings (worth between $60 billion and $80 billion at the gold price of January, 1980) to be used as backing for the Account. The Account would then take on more of the character of a bank, with command over resources that could be regarded as the equivalent of capital funds, as well as interest earning assets and interest-bearing liabilities. This would have the advantage of making the solvency of the "SDR Bank" dependent on its own assets rather than relying exclusively on the guarantee of the United States and other participants. If, at the same time the managers were able to invest a portion of the dollars with considerable flexibility and were also able to vary the relationship of the interest offered on the SDR claim to market rates, the problem of establishing the attractiveness of the claim to potential diversifiers without asking too large a contribution towards any

residual deficit from the United States and other participants could be well on the way to being solved. The United States would of course still be called upon to make a commitment to the scheme and would certainly be a guarantor of the Account.

By thus consolidating a portion of the large short-term liabilities of the United States and placing them in firmer hands the scheme would facilitate in the longer term a gradual reduction in the dollar's reserve currency role. From the point of view of the United States the principal advantage of this would be to alleviate the vulnerability of the dollar and thus the pressure that would otherwise develop for that country to take, in the form of current-account adjustment, all the burden of adjustment to shifts in currency preferences. If the United States were forced to deflate its economy to prevent sales of the dollar by central banks from causing an undue depreciation of the dollar, the growth of US GNP would fall further below its potential growth rate and unemployment would rise further. If on the other hand the US government allowed the depreciation to take its course, inflation would worsen. Both courses would result in unnecessary damage to the US economy. That is why the US government should be prepared to make some contribution to the financial viability of the scheme (though again, we would stress that the United States might well not be called upon in practice to make any higher payments under the scheme than market pressures might otherwise require it to offer, as the recent sharp rise in US interest rates testifies).

In general, participating monetary authorities should not base their decisions on how much of their dollar reserves to deposit in the Account on a narrow view of their self interest, or purely on a search for maximum profits. It should be realized that a cooperative effort is needed, particularly in view of the massive accumulation of reserves by the OPEC countries expected in the coming years. In its evaluation of costs and benefits each country should give proper weight to the desirability, in the common interest, of improving the monetary system and creating greater stability in the exchange markets. We believe that a scheme such as we are suggesting would promote these objectives.

The Role of the Private Sector

The private sector should in time play a major role in promoting the objectives of the scheme. Although the usefulness of the Substitution Account would not depend upon the development of a private market in the SDR claim, it would be greatly improved by such a market. A well-

developed market would certainly enhance the liquidity of the scheme, and, more broadly, help to establish the SDR as the internationally respectable reserve asset. It would also lay the foundation for the development in the longer run of an intervention mechanism in SDRs.

It is thus desirable that a secondary market, in which SDR claims are actively traded and valued, be developed as soon as possible. This would assure holders that they can exchange the claims for dollars or any other currency without suffering a significant loss of value, as an alternative to the other courses of action open to them listed on page 80. In this way encashment at the Account, and the use of designation mechanisms that would oblige creditor countries to accept large additional amounts of claims—making participation less attractive for them—would be avoided as far as possible, and the mechanisms themselves gradually phased out.

In order for a secondary market to be established, several conditions have to be satisfied:

(i) The rights of holders of SDR claims other than official depositors should be protected, in the event of the liquidation of the scheme. There should be specific provision ensuring that such holders would have a clear claim on the Fund to receive dollars equivalent to the full face value of their SDR claims (at then current exchange rates); and for the official participants to bear all the loss, if any, from the operation of the Account.

(ii) An efficient clearing mechanism should be established. This could be provided either by the IMF itself or by a commercial bank or group of banks.

(iii) It is important that the yield of the SDR claim be set in a manner that would ensure a good reception by the markets.

It may be impossible, however, to prevent the new SDR claim going to a discount in the secondary market if its yield were to be set in the same way as that of the existing SDR, even if it offered what is referred to as the "full combined rate," which is a weighted average of recent short-term interest rates in the United States, Germany, the United Kingdom, France and Japan. This is because banks and dealers trading the claims would generally base their carrying (or financing) costs on Eurocurrency rates, which are generally higher than domestic interest for comparable terms.

To avoid the emergence of a discount, which could in turn discourage participation in the scheme, we believe that the IMF might consider setting the rate by reference to the average of the Eurocurrency rates of the major currencies. As suggested above, a period of experimentation might be unavoidable, and the managers should be given discretion to alter the formulation on which the rate is based from time to time. We would hope, however, that as the markets developed the yield on the SDR claim would settle into a relationship with that of SDR bank deposits that reflected the official character of the SDR claim. There are various ways in which central banks, in the requirements they place on their commercial banks, might strengthen the official character of the claim.

Another interrelated aspect of the private use of SDRs is the readiness of banks and other commercial institutions to take deposits and make loans denominated in SDRs. At present, the supply of outstanding SDR-denominated deposits and bonds in the international markets is small. Publicly-issued SDR-denominated bonds in the Eurobond market have been modest in total at $250,000,000 and there have been only six issues of such bonds in the last four years.

Although no exact estimate is available on the size of the deposit market, the fact that only about 20 banks are active takers of deposits suggests that total deposits are at most a few hundred million dollars. These SDR-denominated deposits are quite different and distinct in form from that envisaged for use in a future Substitution Account mechanism. They are deposits with a commercial bank in a "composite of currencies" which happens to consist of the same currencies and percentage mix as the SDR. Interest rates quoted for these SDR-denominated deposits are based on rates at which the commercial bank can deploy the individual currencies for the same maturity. These will most likely be the "Euromarket" rates for the major currencies; where there is no Euromarket and domestic investment is prohibited to foreigners the calculated interest rate rate used for that currency will be zero.

In the past, it has been argued that banks have not been willing to take SDR-denominated deposits because there is no forward market in SDRs. As a result, banks would face an open exchange risk because the currency actually deposited and the corresponding asset acquired by the bank would be dollars or another traded currency. However, this point may sometimes be exaggerated. Banks can invest and find for-

ward cover in most of the traded currencies represented in the SDR and, if demand increased, an active market in SDR forwards might be created. The Study Group believes there might be a case for an official institution, such as possibly the Bank for International Settlements, to encourage this development by making a forward market in SDRs.

The critical requirement for the development of a bank deposit market in SDRs, in our opinion, is a source of large-scale investors. If the proposed Substitution Account were launched on a substantial scale, and central banks began using the SDR claims and trading them on secondary markets, commercial banks' awareness of this activity, and participation in it, might encourage them to offer SDR-denominated deposits on a wider scale both to central banks and to private-sector investors.

Once banks accepted SDR-denominated deposits on a substantial scale they could be expected to begin to offer borrowers the option of denominating loans in SDRs and so match their currency book. Syndicated loans denominated in SDRs could become a feature of the banking market. Official institutions, such as the World Bank, might equally be encouraged to issue medium or long-term securities denominated in SDRs.

We recognize that the development of a market in SDR claims and of the use of SDRs as a unit of denomination for private sector financial transactions will be a gradual process. The official scheme should be designed to encourage this process. We consider that a scheme such as we propose would provide incentives to private-sector institutions to develop such markets.

Possible Supplementary or Alternative Arrangements

While the Study Group emphasizes the necessity to reach agreement on the establishment of a Substitution Account, it also recognizes that the trends toward reserve diversification noted above are likely to continue over the next few years. The Group has accordingly considered possible ways in which the official international community might handle such pressures so as to minimize any disturbance or disruption they might cause while an SDR Substitution Account was being established and developed.

One point that may be made at the outset is that the present confusion in the provision of a reserve base for the system arguably itself contributes unnecessarily to the uncertainty felt by private and official holders and thus to the potential for erratic capital flows. To the extent that the developments that are taking place already—such as the gradual emergence of the Deutschemark and, on a smaller scale, the Swiss franc and the yen as reserve currencies—could be made more explicit and transparent, it could be argued that at least this source of uncertainty may be alleviated.

Further, because of the unwillingness of potential reserve centers to allow other central banks to hold significant amounts of their currency in domestic form, such holdings as have developed have predominantly been in external form—most notably in Euro Deutschemarks. (It is estimated that, subtracting the proceeds of the Carter notes issued in December, 1978 from total DM reserves, the proportion of remaining DM reserves held in the Euromarket at end-1978 was approximately 66 percent.) It could be argued that this situation has involved many of the disadvantages of running a reserve currency without using some of the possibilities for controlling its development. In these circumstances, other central banks will tend not to feel any great responsibility for the overall and long-run effects of the developments of which their individual decisions are a part—especially if their individual holdings are fairly small.

Recently, the central banks concerned have all begun to accept to some extent the different roles thrust upon them. This is important because it would facilitate more explicit discussion of the needs, or at least preferences, of the world's central banks. Such discussion might help to engender a much greater sharing of the responsibility for the stability of the system and hence slower and more predictable shifts in portfolio preference. Evidence of broad agreement on portfolio patterns among central banks should also help to reduce the volatility of private markets.

Such discussion and negotiation would be bound to be difficult and protracted. Compromises would be required between the preferences of potential or actual reserve centres among each other and with non-reserve centres as to the volume of reserve assets and the conditions under which they would be supplied in each currency. The Group recognizes, moreover, that quite apart from the formidable technical and negotiating problems that would be involved, significant

developments in this direction could have implications for the wider and more fundamental questions of exchange rate and intervention policies and the global volume of reserves. Nevertheless, the Group believes that, for two main reasons, the possibility of more explicit arrangements for reserve currency holdings should be further explored. First, as has already been stressed, potentially disruptive pressures for diversification could still erupt at any time; and secondly, there would be genuine potential benefits for all parties if some forms of agreement, however rough and ready, could be reached on the way in which reserve-holding patterns might develop.

For example, potential reserve diversifiers might give formal or informal undertakings only to diversify their reserves in line with prearranged guidelines—such as an agreement on their part to acquire no further holdings in Eurocurrencies—in return for a degree of access to the money and capital markets of the new reserve centres. Such arrangements would offer developing countries, in particular, a limited freedom which they do not possess in many cases at present, whilst also offering to the reserve currency centers a somewhat greater degree of control over capital movements into and out of their currencies. Further, current exchange rate instability is at least partly caused by the inadequacy of the volume of borrowing in the capital markets of potential reserve currency centres in relation to potential capital inflows.

Whether such a framework for the discussion of reserve holdings contributed to exchange rate stability might depend to some extent on the methods used for achieving any further degree of diversification. Two broad approaches may be distinguished in principle:

(i) the balance of payments channel.

(ii) the foreign currency substitution channel.

The balance of payments channel. New reserve currencies might develop as the result of policies followed by the potential reserve centers whereby their customary surpluses on current account were substantially more than offset by deliberately stimulated long-term capital outflows. One implication of such developments that might be unwelcome is that, if the U.S. balance of payments remained unchanged, the total of world reserves would be thereby increased. There may in any case be a preference among the potential reserve centers to maintain in the future smaller current account surpluses, with occa-

sional moves into deficit, rather than foster large net capital outflows: and there may also be practical difficulties in the relative lack of development of their domestic capital markets. On the other hand, should it prove very difficult permanently to reduce the current-account surpluses that these countries have generally experienced, it can be argued that fostering large net capital outflows would be a helpful contribution to the international adjustment process and to exchange rate stability.

An alternative or complementary approach to the balance of payments channel is the **foreign currency substitution channel.** Problems posed by the relative lack of development of surplus countries' capital markets might also, to some extent, be avoided by this approach which allows for diversification outside the markets. For example, the strong currency countries could issue obligations in their own currencies in exchange for dollar claims on the United States. The advantages would be that they could thereby arguably sterilize the domestic monetary effects of foreign currency inflows before they actually occurred; that such techniques would be independent of the state of the countries' domestic financial markets; and that if the claims were in the form of long-term placements with central banks they could be less volatile than short-term capital inflows. This approach might be considered analogous to a swap, with one leg of it in longer-term assets. However, strong currency countries would under this proposal have to accept further accumulations of dollar reserves and presumably the resultant exchange risk, unless bilateral arrangements are agreed between participating countries to share the exchange risk or the strong currency countries deposited newly-acquired dollar reserves in the Substitution Account.

Techniques of financial diplomacy which might influence the currency preferences of official holders at the margin are inappropriate when dealing with a very large and diverse group of private holders. Private holders will continue to respond to the actual and perceived underlying economic conditions. However, the experience of recent years suggests that private holders are often influenced by fears or beliefs that official holders are diversifying. To the extent that the fears could be calmed by the knowledge of the existence of inter-central bank agreements there might be an improved degree of stability in the currency distribution of private holdings.

Conclusion: The Study Group considers that there is an urgent need to reach agreement on a Substitution Account meeting the needs of all participants, attracting widespread support and with strong links to the private sector. The scheme would not solve all the problems of the international monetary system: it is not designed to do so. But it would mark an important step forward in the evolution of the system. Failure to reach such an agreement would risk adding to the volatility of exchange rates and the instability of current international monetary arrangements. At the same time, granted the likely strength of the trend towards the diversification of currency reserves, and the time it will take to put a Substitution Account into place, it is desirable that more explicit discussion should develop among the central banks concerned as to the ways in which the legitimate preferences of all parties may be met.

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The Group of Thirty was established in December 1978, in order to explore the basic problems in the functioning of the international economic system. It meets twice a year, for two to three days at a time. Between these meetings, study groups and researchers gather material to serve as the basis for the Group's discussions.

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Group of Thirty

The Foreign Exchange Markets under Floating Rates

A study in international finance

By
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